

ABSTRACT

A production operation is controlled by electronically scanning and reading printed information at intervals along a component tape. The printed information is continuously scanned and read from the carrier tape portion or the cover tape portion of the component tape as components are removed from the component tape during a production operation.

In a production facility, the data from many component tapes is transmitted simultaneously to a production control system where all data is processed. The processed data is used to automatically control a production operation by using the printed information to control resources of the production operation, resources including

component inventory, equipment, and facilities. Applications controlled by the printed component tape information include automatic production initial set-up verification, automatic production feed change set-up verification, feeder performance verification, material monitoring including automatic backflushing and stock check/work-in-process cycle counting, and production system control.